

Appendix A. ADEQ Approved Cost and Procedural Guidelines

The Technical Review staff uses the following guidelines and procedures. These procedural guidelines review the reasonableness of the costs charged for site characteristics and corrective action of the LUST sites.

CONSULTANT GUIDELINES FOR UST PROJECTS	
Cost Category	Cost Guidelines
Principal	\$100 per hour
Senior Level Professional	\$100 per hour
Project Level	\$85 per hour
Staff Level Professional	\$75 per hour
Field Level Personnel	\$55 per hour
Administration/Secretarial	\$45 per hour
Clerical	\$30 per hour
Technical Personnel (CADD, Map Production, etc.)	\$55 per hour

The above guidelines represent the upper portion of a reasonable range for prices and units. These guidelines may be exceeded if the individual facts surrounding an application warrant this decision.

SUBCONTRACTOR GUIDELINES FOR UST PROJECTS*	
Cost Category	Cost Guidelines
Construction Supervisor	\$55 per hour
Skilled Labor	\$40 per hour
General Labor	\$30 per hour
Excavation and Haul (contaminated soil)	\$25 per ton (up to and including 125 miles)
Backfilling (material, equipment, compact, hauling, compaction, labor)	\$25 per ton
Landfill Disposal (contaminated soil)	\$60 per ton
Incineration (Contaminated soil) On-site (includes labor)	\$60 per ton Mob/Demob \$2,500 (includes round trip travel up to 250 miles)
Off-site (includes waste characterization but not hauling)	\$85 per ton
Mileage (includes passenger, pickup, truck and utility vehicles)	\$0.60
Subcontractor Markup	20 percent

* The Subcontractor Cost Guidelines include a 20% markup.

The above guidelines represent the upper portion of a reasonable range for prices and units. These guidelines may be exceeded if the individual facts surrounding an application warrant this decision.

Analytical Guidelines for UST Projects*			
Cost Category	Cost Guidelines		
	Soil	Groundwater	Air
TPH by 418.1 AZ/ BLS-181	\$60	\$60	-
TPH by 8015/BLS-191	\$115	\$115	\$110
BTEX by EPA Method 8020	\$100	-	\$120
Halogenated VOCs by Method 8010	\$155	-	\$150
EPA 502.2 Target compounds including BTEX	-	\$250	-
EPA 524 Target compounds including BTEX	-	\$275	-
BTEX EPA Method 503.1 or 502.2	-	\$110	-
EPA Method 601/602	-	\$205	-
EPA Method 601	-	\$135	-
EPA Method 602	-	\$115	-
EPA Method 8015/8020	-	-	\$150
EPA Method 8010/8020	\$220	-	-

Analytical Guidelines for UST Projects*			
Cost Category	Cost Guidelines		
Lead by EPA Method 6010	\$40	\$40	-
Mobile Labs (per hour)	\$220	\$220	-
Mobile Labs Mob/Demob**	\$250	\$250	-

** Includes round trip travel up to 250 miles per sampling event and excludes lab technician's per diem.

Drilling Guidelines for UST Projects*	
Cost Category	Cost Guidelines
Monitor Well Installation by Auger Rig 2-inch diameter MW 4-inch diameter MW (40 to 140 feet deep)	\$30 per foot \$40 per foot Mob/Demob \$500 (includes round trip travel up to 250 miles)
Monitor Well Installation by Air Rotary Rig 2-inch diameter MW 4-inch diameter MW 6-inch diameter MW	\$50 per foot \$60 per foot \$70 per foot Mob/Demob \$700 (includes round trip travel up to 250 miles)
Monitor Well Installation by Rotosonic Rig 2-inch diameter MW 4-inch diameter MW 6-inch diameter MW	\$60 per foot \$70 per foot \$80 per foot Mob/Demob \$1000 (includes round trip travel up to 250 miles)

* Well installation unit costs include drilling crew time, materials, construction, surface completion and well development. Drilling Unit Cost Guidelines include a 20% markup, decontamination and support vehicles, but excludes per diem.

Drilling Guidelines for UST Projects*		
Cost Category	Cost Guidelines	
Monitor Well Installation by Becker Rig 2-inch diameter MW 4-inch diameter MW 6-inch diameter MW	\$70 per foot \$80 per foot \$90 per foot Mob/Demob \$1,200 (includes round trip travel up to 250 miles)	
Soil Borings	<u>Unit Cost</u>	<u>Mob/Demob Costs**</u>
Hollow Stem Auger	\$20 per foot	\$500
Air Rotary	\$30 per foot	\$700
Rotosonic	\$40 per foot	\$1000
Becker	\$50 per foot	\$1200
Drill rig and crew	\$185 per hour Hollow Stem Auger \$225 per hour Air Rotary \$275 per hour Rotosonic \$300 per hour (Becker Rig)	
Well Abandonment		
4-inch MW or less	\$8 per foot	
Greater than 4-inch MW	\$12 per foot	
Soil Boring - Grouting, Patch		
6-inch diameter or less	\$5 per foot	
Greater than 6-inch diameter	\$7 per foot	

* Well installation unit costs include drilling, crew time, materials, construction, surface completion and well development unit cost. Drilling Unit Cost Guidelines include a 20% markup, decontamination and support vehicles, but excludes per diem.

** Mob/demob costs for drilling include round trip travel up to 250 miles.

Personnel Task Description	
Labor Category	Authorized Tasks
Principal	<ul style="list-style-type: none"> P Directs professional staff. P Serve as technical expert or coordinator of large or technically challenging projects. P Provide final review of project documents that legally bind the company. P Limited site visits on complex site projects. P Limited review of technical reports and new technologies.
Senior Level Professional	<ul style="list-style-type: none"> P Project management/oversight. P Limited work plan preparation on complex sites. P Final Report preparation/review. P Develop and oversee project budget. P Work plan review. P Coordinate with agency, client and subcontractors. P Occasional site inspections. P Hydrogeologic and contaminate modeling P Equipment specification review. P Supervise complex remediation activities.
Project Level	<ul style="list-style-type: none"> P Work plan preparation. P Field work preparation and planning. P Occasional site visits during site characterization activities. P Conduct field activities during complex remediation activities. P Report preparation and review. P Data review and analysis P Equipment selection and design P Supervise UST, soil and groundwater remediation activities.

Personnel Task Description	
Labor Category	Authorized Tasks
Staff Level	<p>P Report preparation.</p> <p>P Remediation system installation and maintenance.</p> <p>P Site reconnaissance and mapping.</p> <p>P Obtain site access.</p> <p>P Installation of soil boring and monitoring wells.</p> <p>P Supervise UST removal and soil removal and other on-site remediation activities.</p> <p>P Waste characterization.</p> <p>P Assist in modeling and data analysis.</p>
Field Level	<p>P Groundwater monitoring and monthly gauging.</p> <p>P Well purging development.</p> <p>P Free product removal.</p> <p>P Installation of soil borings and monitoring wells.</p> <p>P Limited subcontractor supervision.</p> <p>P Field equipment/sample preparation.</p> <p>P Decontamination.</p> <p>P Other routine field activities.</p>
Technical Personnel	<p>P CADD work.</p> <p>P Generate new drawings, maps and plans system/equipment operation.</p> <p>P Welding.</p> <p>P Electrician.</p>
Administrative/Secretarial	<p>P Invoice preparation.</p> <p>P Word Processing.</p> <p>P Proofreading/Editing.</p>
Clerical	<p>P General clerical duties.</p> <p>P Documentation reproduction.</p> <p>P Report binding.</p> <p>P Filing.</p>

ADEQ Approved Procedural Guidelines

1. If the tank tightness test results confirm a suspected release but are not provided with the technical reports, the costs of the tightness test will not be reimbursed.
2. If documentation of free product disposal is not provided, free product disposal will not be reimbursed unless adequate documentation is supplied by the owner/operator.
3. Soil borings and/or wells that are not adequately placed for the delineation of the extent of soil or groundwater contamination are not reimbursable.
4. All soil borings not associated with sampling or well construction are not reimbursable.
5. Drilling and associated costs will not be reimbursed if ADWR permits are not obtained for monitoring wells, recovery wells or soil borings over 100'.
6. If monitoring wells and/or soil borings are not documented in ADEQ file, the cost associated with those monitoring wells and/or soil borings are not reimbursable.
7. If the amount of soil excavated as reported in the technical documents varies by 25% or more with the amounts of soil documented with transportation manifest, then the lower of the two numbers will be used to determine reimbursement of the transportation and excavation costs.
8. If the amount of soil documented by transportation manifests varies by 10% or more with the amount of soil documented by burn certificates or landfill receipts, then the lower of the two numbers will be used to determine reimbursement of disposal costs.
9. If transportation manifests, burn certificates or landfill receipts are not documented, associated costs would not be reimbursable. The associated costs include, but are not limited to, excavation, hauling and disposal costs.
10. If rush charges for laboratory analyses are not justified in the technical documentation, the extra charge is not reimbursable.
11. If sampling and analyses were conducted as part of the tank closure and a release was documented in the initial site characterization report, then the sampling and analysis costs are reimbursable.
12. Treatment and disposal costs are reimbursable only when the necessary permits have been obtained.

13. If test methods used to analyze the samples are not appropriate to detect compounds associated with the product released, the laboratory costs will not be reimbursed.
14. If the chain-of-custody forms are not included in the technical reports and are not properly signed by the sampler and an Arizona-licensed laboratory, the laboratory costs, soil boring installation and sample collection associated with that sampling will not be reimbursed.
15. Costs for soil removal and disposal are only reimbursable, if sample results show the soil was contaminated to levels above Arizona Department of Health Services guidelines.
16. If monitoring wells are not constructed such that the water table is intercepted by the screened interval at the time of construction, the associated costs will not be reimbursable.
17. If Arizona-licensed laboratory quality control or quality assurance documentation is not included in the laboratory reports, the laboratory analyses will not be reimbursed.
18. If soil and/or water samples analyzed by the laboratory exceed the US EPA holding times, the costs for analyses and sample collection are not reimbursable.
19. If an active Vapor Extraction System (VES) is installed at a LUST site and supporting documentation does not include VES design criteria (such as soil conditions, depth to groundwater, volatility of contaminants), costs associated with VES installation, operation and maintenance are not reimbursable unless confirmation samples show that the system is operational and contributing to site remediation.
20. Costs incurred for performing corrective actions deemed unacceptable by ADEQ, are not considered reimbursable through the Arizona State Assurance Fund.
21. If no sample results are available that indicate that the soil was contaminated, but a written notice is provided by the fire marshall that indicates petroleum contaminated soils were removed for safety concerns, the costs for soil removal and disposal are reimbursable.
22. Tank closures are eligible costs under the Arizona State Assurance Fund program if performed as part of corrective action. There must be evidence that a known release was reported before initiation of the tank closure, or a release was discovered 60 days following the tank closure. (This can be supported with the "Notification of Release" report, or within the contents of the "14 days" report or other substantive documentation.)
23. If expenses are otherwise eligible under the Arizona State Assurance Fund program, any line item expenses under \$300 each and in aggregate on the prime contractor's invoice, will not

require specific documentation. However, the expenses must be identified on the invoice to insure its eligibility. Line item expenses normally falling into this category are copy/reproduction costs, telephone charges, mileage and/or travel.

24. If the invoice submitted does not identify the site location, written documentation or an affidavit must be obtained from the vendor identifying the location. If this cannot be obtained, the applicant or their consultant is required to confirm the site location by providing a facsimile of an affidavit, followed by a hard copy.
25. Companies/governmental entities using their own maintenance personnel to conduct remediation may claim actual labor and fringe benefit costs incurred.
26. Cost associated with preparing and advertising for bids are eligible for reimbursement.
27. The Personnel Task Description Guidelines list the appropriate levels of personnel for conducting corrective action activities. Personnel rates claimed above the approved activity rates will be subject to professional review on a case by case basis.
28. The Cost Guidelines represent the upper limit of reasonableness. Costs or units exceeding these guidelines, with adequate documentation, would be reimbursable.
29. The technical reviewer can use professional judgment to decide if air travel costs were necessary and/or associated with corrective action.
30. Maximum contractor markups are not to exceed 20%, even when the total invoice price is below the cost guidelines.
31. Supervisory costs of owner/operators to monitor a contractor performing corrective action activities are not reimbursable.
32. Reinstallation of electrical wiring, dispensers, pumps, and plumbing requiring removal for corrective actions is reimbursable.
33. Landscaping for purposes of replacing trees, shrubs and sod due to excavation or stress caused by contamination is not reimbursable. Landscaping to restore topography and grasses only will be reimbursed.
34. Costs associated with calibration and/or training of any field/testing equipment is not reimbursable. This cost should be included in the cost to rent/lease the equipment.

35. Costs associated with vandalism that occurs on a site during corrective action or containment and clean up activity are not reimbursable.
36. Costs associated with the preparation of a reimbursement application appeal are not reimbursable except costs associated with gathering additional supporting documentation for costs originally denied will be reimbursable.
37. Costs associated with vapor monitoring (leak detection systems) in tank pits are not reimbursable.
38. Costs associated with the preparation of a Spill Prevention, Control and Countermeasures (SPCC) Plan or Preparedness Prevention, and Contingency (PPC) Plan are not reimbursable.
39. Costs associated with "overtime" will be considered a reimbursable expense at a rate not to exceed 1.5 times the approved billing rate.
40. If the prime uses an affiliated laboratory, no markup is allowed.
41. When contamination from a release from a UST is discovered as a result of a modified Phase I property transfer assessment (i.e. oil borings, tank tightness test) or a Phase II subsurface investigation (i.e. soil borings, test pits), sampling activities and associated costs are eligible for reimbursement.
42. The minimum waiting period for conducting groundwater sampling following the installation of a monitoring well is one week, unless otherwise approved by ADEQ. Costs associated with premature sampling are not reimbursable.
43. Costs associated with the Mob/Demob of a mobile laboratory, including the hourly on-site rate and a technician's per diem, are reimbursable if the unit is licensed by the Arizona Department of Health Services (ADHS) and the proper chain-of-custodies have been completed.
44. If a laboratory was used that was not licensed by ADHS to perform ADEQ Approved Test methods at the time the samples were analyzed, the costs associated with laboratory analysis and sample collection will not be reimbursable.

45. Costs associated with preparation of corrective action bids, municipal request for proposals, contracts and SAF applications for owner/operators by consultants, legal counsel or accountants/CPA's is applied as a credit against the deductible amount if they meet the following criteria:
- a. A detailed description of tasks performed must be provided.
 - b. Attorney fees or accountant/CPA fees are reimbursable at a rate not to exceed \$100 per hour.
 - c. Paralegal fees are reimbursable at a rate not to exceed \$75 per hour.
 - d. Invoiced work must be directly involved with bid, proposal, contract or SAF application preparation only.
 - e. Legal costs that are not reimbursable include background research, familiarization, litigation, formal appeals, title opinions and other ancillary issues.
 - f. Proper documentation is included in the application for copying costs, telephone, facsimile, and postage costs directly associated with the above.
46. Costs associated with community/neighborhood direct mail notices, and/or Corrective Action Plan Public Notices directly related to corrective action, such as home well surveys and off-site access for sampling purposes, are reimbursable. Costs incurred for public relations, news releases and/or community publications regarding a release at a LUST facility are not reimbursable costs.